

Chapter ILHR 59

HAZARDOUS OCCUPANCIES

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Note: Chapter Ind 59 was renumbered chapter ILHR 59 effective January 1, 1984.

ILHR 59.001 Scope. This chapter applies to all hazardous occupancies as indicated in the scope of each subchapter.

History: Cr. Register, December, 1981, No. 312, eff. 1-1-82.

ILHR 59.01 Definitions. (1) "Combustible liquid" means a liquid as defined in s. Ind 8.01 (19).

(2) "Flammable liquid" means a liquid as defined in s. Ind 8.01 (37).

(3) "Motor vehicle" means any self-propelled device fueled by a flammable or combustible liquid used to transport people or goods.

(4) "Open parking structure" means a structure as defined in s. ILHR 62.10.

(5) "Private garage" means a structure or a part of a structure, either attached to a one- or 2-family dwelling or unattached but serving the dwelling, housing one or more motor vehicles owned by the occupant of the dwelling and used only for personal or family service, not serving as a place of employment.

(6) "Repair garage" means a structure or any part of a structure in which one or more motor vehicles are primarily repaired or serviced.

(7) "Storage garage" means any structure or part of a structure in which one or more motor vehicles are stored or parked and which is not a repair garage, private garage or open parking structure.

History: Cr. Register, December, 1981, No. 312, eff. 1-1-82.

ILHR 59.10 Scope. (1) Except as provided in sub. (2), the requirements of this subchapter apply to storage garages and repair garages.

Note: See ch. Ind 8 — Flammable and Combustible Liquids, for additional requirements pertaining to structures accommodating motor vehicles.

(2) This subchapter does not apply to the following occupancies:

(a) Storage garages serving community-based residential facilities within the scope of ch. ILHR 61;

Note: See s. ILHR 61.10 (2).

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(b) Areas of factories and plants used for the manufacture or assembly of motor vehicles or their components;

(c) Drive-in or drive-through facilities not used for the storage of motor vehicles including, but not limited to those of banks, restaurants, hospitals, car washes, film processing centers or other similar occupancies; and

(d) Storage garages 500 sq. ft. or less in area serving a residential occupancy as specified in ch. ILHR 57.

Note: See s. ILHR 57.01 (4).

History: Cr. Register, December, 1981, No. 312, eff. 1-1-82.

ILHR 59.11 Construction. (1) **FLOORS.** (a) The floor areas accommodating motor vehicles shall be of earth, gravel or noncombustible, nonabsorbent materials.

(b) Service pits and other similar depressions in the floor of a storage or repair garage shall be ventilated in accordance with ch. ILHR 64.

(2) **CLEARANCE REQUIREMENTS.** Headroom clearances shall be maintained in accordance with s. ILHR 51.164.

(3) **CANOPIES.** Free standing canopies and their supports or other similar structures over fuel dispensing equipment, when located less than 10 feet from a property line, shall be constructed of noncombustible materials.

History: Cr. Register, December, 1981, No. 312, eff. 1-1-82; am. (1) (a), Register, October, 1982, No. 322, eff. 11-1-82.

ILHR 59.12 Height and area. (1) **STORAGE GARAGES.** Storage garages shall not exceed the number of stories and corresponding area limitations of Table 59.12-1 or 59.12-2.

(2) **REPAIR GARAGES.** Repair garages shall not exceed the number of stories and 75% of the corresponding area limitations of Table 59.12-1 or 59.12-2.

(3) **ALLOWABLE INCREASE OF FLOOR AREAS.** (a) *Automatic fire sprinkler system protection.* 1. Chapter ILHR 59 buildings not protected by automatic fire sprinkler systems may not exceed the height and area limitations specified in subs. (1) or (2) and Table 59.12-1.

2. a. Chapter ILHR 59 buildings protected by complete automatic fire sprinkler systems may not exceed the height and area limitations specified in subs. (1) or (2) and Table 59.12-2.

b. The area of one story aircraft hangars of type No. 1 to 6 construction may be unlimited provided the building is completely protected by an automatic fire sprinkler system and the building is provided with street access around its entire perimeter.

(b) *Fire divisions.* No storage or repair garage shall be limited in area where divided into sections which do not exceed the maximum areas tabulated in this section by fire division walls as specified in s. ILHR 51.02 (13). All openings in such walls shall be protected by swinging, sliding or overhead fire-resistive door assemblies as specified in s. ILHR 51.047. Doors protecting such openings may be held open if equipped with rate of rise heat or photoelectric activated automatic closing device.

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vices. Doors used as required exits shall comply with the requirements of s. ILHR 51.15.

(4) **MINI-GARAGES.** Mini-garage buildings on the same property may be located less than 30 feet of each other with no restriction on the percentage of wall openings provided the combined gross area of the buildings, including the area between the buildings, is no more than the area permitted by this section.

History: Cr. Register, December, 1981, No. 312, eff. 1-1-82; correction in (3) (a) made under s. 13.93 (2m) (b) 7, Stats., cr. (4), Register, August, 1985, No. 356, eff. 1-1-86; emerg. r. table 59.12 and cr. tables 59.12-1 and 59.12-2, am. (1) and (2), r. and recr. (3) (a), eff. 9-6-86; r. table 59.12 and cr. table 59.12-1 and 59.12-2, am. (1) and (2), r. and recr. (3) (a), Register, November, 1986, No. 371, eff. 12-1-86.

TABLE 59.12-1 — ALLOWABLE HEIGHT (STORIES) AND AREA (SQUARE FEET) FOR BUILDINGS WITHOUT COMPLETE AUTOMATIC FIRE SPRINKLER SYSTEM PROTECTION (MAXIMUM GROSS FLOOR AREA PER FLOOR)
 NOTE #1: DO NOT USE FOR BUILDINGS EXCEEDING 60 FEET IN HEIGHT
 NOTE #2: FOR STORAGE GARAGES ONLY. USE 75% OF VALUES FOR REPAIR GARAGES

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CLASS OF CONSTRUCTION	BUILDING FRONTAGE STREET* EXPOSURE	NUMBER OF STORIES									
		1	2	3	4	5	6	7	8	Over 8	
1. Fire-Resistive Type A	1	25,000	22,000	19,000	16,000	13,000	11,000	9,000	8,000	6,000	
	2	30,500	27,000	24,000	20,500	17,500	15,000	13,000	12,000	10,000	
	3	36,000	33,000	29,000	25,000	22,000	19,000	17,000	16,000	14,000	
	4	41,500	39,000	34,000	29,500	26,500	23,000	21,000	20,000	18,000	
2. Fire-Resistive Type B	1	23,000	20,000	17,000	14,000	11,000	9,000	7,000	6,000		
	2	28,500	25,000	22,000	18,500	15,500	13,000	11,000	10,000	N.P.	
	3	34,000	31,000	27,000	23,000	20,000	17,000	15,000	14,000		
	4	39,500	37,000	32,000	27,500	24,500	21,000	19,000	18,000		
3. Metal Frame Protected	1	21,000	18,000	15,000	12,000						
	2	26,500	23,000	19,500	16,000	N.P.	N.P.	N.P.	N.P.	N.P.	
	3	32,000	28,000	24,000	20,000						
	4	37,500	33,000	29,500	24,000						
4. Heavy Timber	1	17,000	14,000	11,000	9,000						
	2	22,000	19,000	16,000	13,500	N.P.	N.P.	N.P.	N.P.	N.P.	
	3	27,000	24,000	21,000	18,000						
	4	32,000	29,000	26,000	22,500						
5A. Exterior Masonry Protected	1	15,500	13,500	9,500	8,000						
	2	20,000	17,000	14,000	12,500	N.P.	N.P.	N.P.	N.P.	N.P.	
	3	24,500	21,500	18,500	15,500						
	4	29,000	26,000	23,000	19,500						
5B. Exterior Masonry Unprotected	1	14,000	11,500	9,000	7,000						
	2	18,000	15,000	12,500	10,000	N.P.	N.P.	N.P.	N.P.	N.P.	
	3	22,000	19,000	16,000	13,000						
	4	26,000	23,000	19,500	16,000						
6. Metal Frame Unprotected	1	14,000	11,500	9,000							
	2	18,000	15,000	12,500	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	
	3	22,000	19,000	16,000							
	4	26,000	23,000	19,500							
7. Wood Frame Protected	1	12,500									
	2	16,000	N.P.								
	3	19,000									
	4	22,000									
8. Wood Frame Unprotected	1	10,000									
	2	12,000	N.P.								
	3	14,000									
	4	16,000									

N.P. MEANS NOT PERMITTED

* 4-HOUR FIRE DIVISION WALL SHALL BE CONSIDERED AS A STREET FOR THE PURPOSE OF COMPUTING THE AREA LIMITATIONS FOR THIS TABLE

TABLE 59.12-2 — ALLOWABLE HEIGHT (STORIES) AND AREA (SQURE FEET) FOR BUILDINGS COMPLETELY PROTECTED BY AUTOMATIC FIRE SPRINKLER SYSTEM (MAXIMUM GROSS FLOOR AREA PER FLOOR)

NOTE #1: USE FOR ALL BUILDINGS

NOTE #2: FOR STORAGE GARAGES ONLY. USE 75% OF VALUES FOR REPAIR GARAGES

CLASS OF CONSTRUCTION	BUILDING FRONTAGE STREET* EXPOSURE	NUMBER OF STORIES									
		1	2	3	4	5	6	7	8	9	Over 9
1. Fire-resistive Type A One street required for unlimited area. See s. ILHR 51.01 (124)	1	NO LIMIT									
	2	NO LIMIT									
	3	NO LIMIT									
	4	NO LIMIT									
2. Fire-resistive type B One street required for unlimited area. See s. ILHR 51.01 (124)	1		69,000	60,000	51,000	42,000	33,000	27,000	21,000	18,000	N.P.
	2	NO	35,500	75,000	66,000	55,500	46,500	39,000	33,000	30,000	
	3	LIMIT	102,000	98,000	81,000	69,000	60,000	51,000	45,000	42,000	
	4		118,500	111,000	96,000	82,500	73,500	63,000	57,000	54,000	
3. Metal frame protected	1	84,000	63,000	54,000	45,000	36,000	N.P.	N.P.	N.P.	N.P.	N.P.
	2	106,000	79,500	69,000	58,500	48,000					
	3	128,000	96,000	84,000	72,000	60,000					
	4	150,000	112,500	99,000	85,500	72,000					
4. Heavy Timber	1	68,000	51,000	42,000	33,000	27,000	N.P.	N.P.	N.P.	N.P.	N.P.
	2	88,000	66,000	57,000	48,000	40,500					
	3	108,000	81,000	72,000	63,000	54,000					
	4	128,000	96,000	87,000	78,000	67,500					
5A. Exterior Masonry Protected	1	62,000	46,500	40,500	28,500	24,000	N.P.	N.P.	N.P.	N.P.	N.P.
	2	80,000	60,000	51,000	42,000	37,500					
	3	98,000	73,500	64,500	55,500	46,500					
	4	116,000	87,000	78,000	69,000	58,500					
5B. Exterior Masonry Unprotected	1	56,000	42,000	34,500	27,000	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.
	2	72,000	54,000	45,000	37,500						
	3	88,000	66,000	57,000	48,000						
	4	104,000	78,000	69,000	58,500						
6. Metal Frame Unprotected	1	56,000	42,000	34,500	27,000	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.
	2	72,000	54,000	45,000	37,500						
	3	88,000	66,000	57,000	48,000						
	4	104,000	78,000	69,000	58,500						
7. Wood Frame Protected	1	50,000	37,500	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.
	2	64,000	48,000								
	3	76,000	57,000								
	4	88,000	66,000								
8. Wood Frame Unprotected	1	40,000	30,000	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.
	2	48,000	36,000								
	3	56,000	42,000								
	4	64,000	48,000								

N.P. MEANS NOT PERMITTED

*4-HOUR FIRE DIVISION WALL SHALL BE CONSIDERED AS A STREET FOR THE PURPOSE OF COMPUTING THE AREA LIMITATIONS FOR THIS TABLE.

FP ILHR 59.13 Types of exits. (1) **GENERAL.** (a) Only the following types of exits shall be used to comply with the provisions of s. ILHR 59.14:

1. Standard exit as specified in s. ILHR 51.15, except as provided in sub. (2);
2. Stairways as specified in s. ILHR 51.16, except as provided in sub. (2);
3. Smokeproof stair tower as specified in s. ILHR 51.17;
4. Interior enclosed stairway as specified in s. ILHR 51.18;
5. Horizontal exit as specified in s. ILHR 51.19;
6. Fire escapes as specified in s. ILHR 51.20; and
7. Nonparking access ramps with a maximum slope of 1:8.

(b) At least half of the exits required under s. ILHR 59.14 shall be standard exits, stairways, smokeproof stair towers or interior enclosed stairways to grade.

(2) **EXCEPTIONS.** (a) A spiral stairway shall not serve as a required exit, but may be used as an employe convenience stairway if located in nonpublic areas.

(b) The width of required exit stairways serving unoccupied areas, such as storage areas, equipment mezzanines and similar areas not exceeding 750 sq. ft. may be reduced to 3 feet 0 inches.

(c) Doors in standard exits serving rooms, spaces or areas with an occupancy load of 25 persons or less are not required to swing in the direction of egress.

(d) A door not complying with s. ILHR 51.15 (2), may be used as a standard exit serving storage garages or storage areas not exceeding 3,000 square feet in area.

Note: Where accessibility and interior circulation for persons with functional limitations must be provided, the requirements of s. ILHR 52.04 (9) govern.

History: Cr. Register, December, 1981, No. 312, eff. 1-1-82; am. (2) (d), Register, August, 1985, No. 356, eff. 1-1-86.

FP ILHR 59.14 Number and location of exits. (1) **GENERAL.** (a) Except as provided in par. (b), every floor level and every room, space or area of a storage garage and a repair garage shall be provided with at least 2 exits.

(b) One exit is permitted from the following:

1. Any room, space or area used for storage garage purposes with an occupancy load of 10 persons or less and which does not exceed 3,000 sq. ft. in net floor area;
2. Any room, space or area used for repair garage purposes and does not exceed 750 sq. ft. in net floor area;
3. Any room, space or area used as other than a storage or repair garage with an capacity of 25 persons or less; and
4. A mezzanine floor level, provided the mezzanine is:
 - a. Three thousand square feet or less in net floor area;

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- b. Used only for storage purposes;
- c. Open on at least one side to the floor below; and
- d. Not more than 12 feet above the floor below.

(2) EXIT DISTANCE. Exits shall be provided and distributed as follows:

(a) *Storage garages.* 1. No area of a storage garage shall be more than 100 feet from an exit, unless the entire storage garage is protected by an automatic sprinkler system.

2. No area of a storage garage entirely protected by an automatic fire sprinkler system shall be more than 200 feet from an exit.

(b) *Repair garages.* 1. No area of a repair garage shall be more than 75 feet from an exit, unless the entire repair garage is protected by an automatic fire sprinkler system.

2. No area of a repair garage entirely protected by an automatic fire sprinkler system shall be more than 150 feet from an exit.

(c) * *Measurement of exit distance.* The exit distances required by this section shall be measured along public passageways and aisles to:

- 1. Standard exits leading to grade as specified in s. ILHR 51.15;
- 2. Doors opening into smokeproof stair towers as specified in s. ILHR 51.17, interior enclosed stairways as specified in s. ILHR 51.18, or fire escapes as specified in s. ILHR 51.20; or
- 3. Horizontal exits as specified in s. ILHR 51.19.

(3) LOCATION OF EXITS. Except as provided in sub. (1) (b), exits in all storage garages and repair garages shall be located and distributed so that in the event an exit is blocked, another exit is available from every area of the storage garage or repair garage.

(4) EXIT LIGHTS. All required exits shall be identified by an approved exit light. Directional exit lights shall be provided to direct occupants to the exits. Exit lights and directional exit lights shall be as specified in s. ILHR 51.15 (5).

(5) EXIT MAINTENANCE. Exits shall be maintained in accordance with s. ILHR 52.21.

History: Cr. Register, December, 1981, No. 312, eff. 1-1-82; cr. (4), Register, December, 1983, No. 336, eff. 1-1-84; emerg. am. (2) (a) 2. and (b), eff. 9-6-86; am. (2) (a) 2. and (b), Register, November, 1986, No. 371, eff. 12-1-86.

ILHR 59.15 Required exit width. (1) GENERAL. Every floor level of a storage garage and repair garage shall be provided with at least the required aggregate width of exits as specified in ss. ILHR 51.15 (6) and 51.16 (3).

(2) HORIZONTAL EXITS. Horizontal exits may provide up to one-half of the required aggregate width of exits for a floor level.

History: Cr. Register, December, 1981, No. 312, eff. 1-1-82.

*See Appendix A for further explanatory material.

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WISCONSIN ADMINISTRATIVE CODE

ILHR 59

Hazardous occupancies

ILHR 59.16 Capacity of structures. In calculating the required aggregate width of exits under s. ILHR 59.15 and the required number of sani-

ILHR 59.23 Fire protection. (1) STANDPIPES. (a) Except as provided in **FP** par. (e), fire department standpipes shall be provided as follows:

1. In all storage garages and repair garages 3 or more stories in height; and

2. In all storage garage and repair garage floor levels more than 500 sq. ft. in area, located below grade and not accessible to fire fighting vehicles.

(b) Required fire department standpipes with a fire department siamese connection greater than 50 feet to a street shall be interconnected to a standpipe system with such a connection 50 feet or less to a street.

(c) Required fire department standpipes shall be provided in each stair enclosure serving a storage or repair garage and shall be provided with approved 2½ in. valve hose connections at each floor level with one connection in the stair tower and one immediately outside.

(d) Fire department standpipes shall conform to the requirements specified in s. **ILHR 51.21 (3) (e) to (i)**.

(e) 1. The department will recognize alternative systems and designs in lieu of required fire department standpipes, if an equivalent degree of safety is provided in storage or repair garages 60 feet or less in height.

2. The department will accept storage garages or repair garages without fire department standpipes, if clearances are provided to allow fire fighting vehicles access throughout the storage or repair garages.

3. Fire department standpipes as specified in this subsection need not be provided in buildings 60 feet or less in height completely protected by an automatic fire sprinkler system.

4. Fire department standpipes shall be provided in buildings more than 60 feet in height in accordance with s. **ILHR 51.21 (3)**.

(2) * **FIRE EXTINGUISHERS.** Portable fire extinguishers shall be provided and maintained as specified in s. **ILHR 51.22**.

Note: See ch. **ILHR 52**, subch. II for requirements pertaining to automatic fire sprinkler systems.

History: Cr. Register, December, 1981, No. 312, eff. 1-1-82; r. (2), renum. (3) to be (2), Register, June, 1983, No. 330, eff. 7-1-83; emerg. cr. (1) (e) 3. and 4., eff. 9-6-86; cr. (1) (e) 3. and 4., Register, November, 1986, No. 371, eff. 12-1-86.

ILHR 59.24 Fire alarms. A fire alarm system complying with s. **ILHR FP 51.24** shall be provided in every storage garage and repair garage where more than 10 persons are employed above the second story except storage garages and repair garages which are provided with a complete automatic sprinkler system.

History: Cr. Register, December, 1981, No. 312, eff. 1-1-82.

*See Appendix A for further explanatory material.